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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,180	01/12/2001	Paramvir Bahl	MSI-566US	2778

22801 7590 11/14/2005

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EXAMINER

BATES, KEVIN T

ART UNIT PAPER NUMBER

2155

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/760,180

Applicant(s)

BAHL, PARAMVIR

Examiner

Kevin Bates

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-18, 25-39, 45-55 and 57-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-18, 25-39, 45-55, and 57-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This Office Action is in response to a communication made on October 7, 2005.

Claims 16-18, 25-39, 45-55, and 57-67 are pending in this application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 58 rejected under 35 U.S.C. 102(b) as being anticipated by Theimer (5493692).

Regarding claim 58, Theimer teaches a system, comprising:

a server having memory;

a user database stored in the memory of the server (Column 7, lines 29 – 60), the user database containing a user field for storing a user name of a mobile computer user, and a last known location field for storing a most recent location of a computer user identified in a corresponding user field (Column 7, line 61 – Column 8, line 11);

a wireless access point of a wireless local area network configured to receive radio frequency network transmissions from one or more mobile computers (Column 5, lines 26 – 32);

a mobile computer having memory and a wireless network interface for radio frequency communication with the wireless access point (Column 5, lines 48 – 55);

a location tracking system in the mobile computer memory configured to determine a location of the mobile computer; a location manager in the mobile computer memory configured to transmit the location of the mobile computer and the user name of a mobile computer user to the server via the wireless network interface when a request to do so is received from the server (Column 8, lines 48 – 55; Column 6, lines 28 – 45); and

a computing unit having a computing unit location manager configured to search the user database of the server to determine information regarding the location of a mobile user (Column 4, lines 30 – 34).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-17, 25-30, 32, 34, 36-38, 45-47, 49-50, 52-54, 63, and 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer (5493692) in view of Christ (5977913).

Regarding claim 16, Theimer teaches a method, comprising:

determining a location of a computing unit (Column 4, lines 30 – 33) using RF signals and a plurality of RF beacons having known locations (Column 5, line 48 – Column 6, line 14);

periodically transmitting, from the computing unit, the location of the computing unit to a network server together with a user name of a user using the computing unit (Column 8, line 64 – Column 9, line 1); and

including an active signal with the periodically transmitted information when the user is actively using the computing unit (Column 9, lines 26 – 37).

Theimer does not explicitly indicate using environmental profiling to establish the location of the computing unit.

Christ teaches a system with a plurality of RF beacons (Column 9, lines 50 – 53) that polls the plurality of beacons for location/environmental information about the computing unit (Column 10, lines 34 – 53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Christ's teaching of locating users in certain rooms inside of a building (Column 7, lines 13 – 17) using present wireless technology (Column 9, lines 43 – 48) in Theimer's location system.

Regarding claim 17, Theimer teaches the method as recited in claim 16, wherein the computing unit is a mobile computing unit; and the network server is a wireless network server (Column 5, lines 48 – 51).

Regarding claim 25, Theimer teaches the method as recited in claim 16, wherein the user actively using the computing unit further comprises the user having used the computing unit to within a pre-defined time period (Column 27, lines 25 – 36).

Regarding claim 26, Theimer teaches the method as recited in claim 16, wherein transmitting the location of the computer unit to a network server only occurs

upon a request from the network server for the computer unit to update the is location of the computer unit (Column 8, lines 48 – 58 where the RPC is the request for the location information from the GPS).

Regarding claim 27, Theimer teaches the method as recited in claim 16, further comprising encrypting the location of the computing unit prior to transmitting the location of the computing unit to the network server (Column 21, lines 13 – 20).

Regarding claim 28, Theimer teaches a system, comprising:

a server having memory;

a user database stored in the memory of the server (Column 7, lines 29 – 60), the user database containing a user field for storing a user name of a mobile computer user, and a last known location field for storing a most recent location of a computer user identified in a corresponding user field (Column 7, line 61 – Column 8, line 11);

a wireless access point of a wireless local area network configured to RF receive network transmissions from one or more mobile computers (Column 5, lines 27 – 32; lines 48 – 53);

a mobile computer having memory and a wireless network interface for RF communication with the wireless access point of the wireless local area network (Column 5, lines 48 – 55);

a location tracking system in the mobile computer memory configured to determine a location of the mobile computer;

a location manager in the mobile computer memory configured to periodically transmit the location of the mobile computer and the user name of a mobile computer

user to the server via the wireless network interface (Column 8, lines 48 – 55; Column 6, lines 28 – 45); and

a computing unit having a computing unit location manager configured to search the user database of the server to determine information regarding the location of a mobile user (Column 4, lines 30 – 34; Column 7, lines 29 – 60).

Theimer does not explicitly indicate using a beacon packet's signal strength received from the wireless access point and using a pervious established radio map.

Christ teaches a system with a plurality of RF beacons (Column 9, lines 50 – 53) that polls the plurality of beacons for location/environmental information and their signal strength about the computing unit (Column 10, lines 34 – 53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Christ's teaching of locating users in certain rooms inside of a building (Column 7, lines 13 – 17) using present wireless technology (Column 9, lines 43 – 48) in Theimer's location system.

Regarding claim 29, Theimer teaches the system as recited in claim 28, wherein the computing unit is a stationary computing unit (Column 5, lines 41 – 48).

Regarding claim 30, Theimer teaches the system as recited in claim 28, wherein the computing unit is a mobile computing unit (Column 5, lines 41 – 48).

Regarding claim 32, Theimer teaches the system as recited in claim 28, wherein the user database further comprises an active field indicating if the mobile computer user has used the to mobile computer within a specified time period (Column 9, lines 26 – 37).

Regarding claim 34, Theimer teaches the system as recited in claim 28, wherein the location manager transmits the location of the mobile computer in coordinates relative to a known absolute location (Column 5, lines 48 – 64).

Regarding claim 36, Theimer teaches the system as recited in claim 28, wherein the location manager transmits the location of a network node with which the mobile computer is communicating as the location of the mobile computer (Column 8, lines 49 – 58).

Regarding claim 37, Theimer teaches the system as recited in claim 28, wherein:

the mobile computer is a first computer;

the system further comprises a second computer having a location manager (Column 8, lines 45 – 48);

the user database further comprises an active field;

the mobile computer user is logged onto both the first mobile computer and the second computer;

the location manager of the first computer and the location manager of the second computer are further configured to transmit an active signal for a specified period of time after the respective computers are used;

the active field corresponding to the first computer indicating the mobile computer user last used the first computer when the active signal is transmitted from the first computer;

the active field corresponding to the second computer indicating the mobile computer user last used the second computer when the active signal is transmitted from the second computer; and

only one active field indicating activity by the mobile computer user at any given time (Column 9, lines 26 – 37; Column 21, lines 35 – 59).

Regarding claim 38, Theimer teaches the system as recited in claim 28, wherein the user database further comprises an OK field that contains data that identifies one or more system users that are authorized to receive data regarding the location of the mobile computer user identified in the corresponding user field (Column 11, lines 1 – 6).

Regarding claim 45, Theimer teaches a mobile computing unit, comprising:
memory;

a wireless network interface configured to connect the mobile computing unit to multiple wireless access points of one or more remote servers (Column 5, line 48 – Column 6, line 14);

a location tracking service configured to determine a location of the mobile computer unit (Column 6, lines 28 – 45; Column 4, lines 30 – 33); and

a location manager configured to periodically transmit the location of the mobile computing unit to one or more of remote server via the wireless network interface (Column 8, line 64 – Column 9, line 6).

Theimer does not explicitly indicate using a beacon packet's signal strength received from the wireless access point and using a pervious established radio map.

Christ teaches a system with a plurality of RF beacons (Column 9, lines 50 – 53) that polls the plurality of beacons for location/environmental information and their signal strength about the computing unit (Column 10, lines 34 – 53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Christ's teaching of locating users in certain rooms inside of a building (Column 7, lines 13 – 17) using present wireless technology (Column 9, lines 43 – 48) in Theimer's location system.

Regarding claim 46, Theimer teaches the mobile computing unit as recited in claim 45, wherein the location manager is further configured to transmit a user name of a user logged onto the mobile computing unit to one or more of the remote servers together with the location of the mobile computing unit (Column 27, lines 7 – 13).

Regarding claim 47, Theimer teaches the mobile computing unit as recited in claim 45, wherein the location manager is further configured to transmit an active signal to one or more of the remote servers together with the location of the mobile computing unit when a user logged is onto the mobile computing unit has actively used the unit within a specified period of time (Column 21, lines 35 – 65).

Regarding claim 49, Theimer teaches the mobile computing unit as recited in claim 45, wherein the location manager identifies and transmits the location of a network node with which the mobile computing unit is communicating as the location of the mobile computing unit (Column 20, lines 12 – 18; Column 21, lines 28 – 34).

Regarding claim 50, Theimer teaches the mobile computing unit as recited in claim 45, wherein the location manager is configured to invoke the location tracking

service when commanded to do so by a second computing unit or one or more of the remote servers (Column 21, lines 28 – 34).

Regarding claim 52, Theimer teaches the mobile computing unit as recited in claim 45, wherein the location manager transmits the location of the mobile computing unit relative to a known absolute location (Column 5, lines 48 – 64).

Regarding claim 53, Theimer teaches the mobile computing unit as recited in claim 45, wherein the location manager transmits a geographic region to one or more of the remote servers as the location of the mobile computing unit (Column 5, lines 48 – 64).

Regarding claim 54, Theimer teaches the mobile computing unit as recited in claim 45, wherein the location manager is further configured to encrypt the location of the mobile computing unit before transmitting the location of the mobile computing unit to one or more of the remote servers (Column 21, lines 13 – 20).

Regarding claim 63, Theimer teaches a method comprising:

- receiving radio frequency transmissions emitted from a plurality of radio frequency base stations of a wireless local area network (Column 5, line 48 – Column 6, line 14);
- identifying the location of the mobile computing device as that of a computer user (Column 8, line 59 – Column 9, line 1);
- receiving a request for the location of the computer user from a computing unit (Column 9, lines 7 – 20); and

transmitting the location of the computer user to the computing unit (Column 8, line 59 – Column 9, line 1).

Theimer does not explicitly indicate measuring relative strengths of the radio frequency transmissions; determining a location of a mobile computing device based on the relative strengths.

Christ teaches a system with a plurality of RF beacons (Column 9, lines 50 – 53) that polls the plurality of beacons for location/environmental information and their signal strength about the computing unit (Column 10, lines 34 – 53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Christ's teaching of locating users in certain rooms inside of a building (Column 7, lines 13 – 17) using present wireless technology (Column 9, lines 43 – 48) in Theimer's location system.

Regarding claim 65, Theimer teaches the method of claim 63, wherein the act of identifying the location of the mobile computer device as that of the computer use comprises receiving from the mobile computer device, an identifier associated with the computer user (Column 7, lines 35 – 40).

Regarding claim 67, Theimer teaches the method of claim 63, further comprising:

Receiving an active signal indicating that the computer user has actively used the mobile computer device within a specified period of time, and wherein the act of identifying the location comprises defining the location of the mobile computer device as

that the computer user if the active signal has been received within a predetermined period of time (Column 9, lines 26 – 37).

Claims 33, 35, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer in view of Christ as applied to claims 16-17, 25-30, 32, 34, 36-38, 45-47, 49-50, 52-54, 63, and 65-67 above, and further in view of Norris (578150).

Regarding claims 33, 35, and 51, Theimer teaches the system as recited in claims 28 and 45, wherein the location of the first computer is represented GPS standards (Column 8, lines 52 – 58).

Theimer does not explicitly indicate that the GPS location is an absolute geographical unit.

Norris teaches a system, which includes mobile devices delivering location information received from GPS. Norris further teaches that the GPS can deliver absolute geographical coordinates (Column 5, lines 39 – 46) and that the absolute location includes longitude, latitude, and altitude (Column 5, lines 28 – 38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Norris calculations of an absolute location of a mobile device in Theimers system in order to know the exact precise position of an individual in case of an emergency (Column 1, lines 20 – 30).

Claims 18, 31, 39, 48, 55, 57, 59-62, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer in view of Christ as applied to

Art Unit: 2155

claims 16-17, 25-30, 32, 34, 36-38, 45-47, 49-50, 52-54, 63, and 65-67 above, and further in view of Dunn (5659596).

Regarding claim 18, Theimer teaches the method as recited in claim 16.

Theimer does not explicitly indicate time-stamping the location of the first computer with the time that the first computer was identified.

Dunn teaches a system that includes locating mobile devices. Included in this teaching is a system of time-stamping the location information of the mobile device (Column 8, lines 15 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Dunn's teaching of time-stamping and using that time-stamping in Theimer's user location system in order for the system to know where the last known location of a user is based upon what time the location.

Regarding claim 31, Theimer teaches the system as recited claim 28.

Theimer does not explicitly indicate that:

the mobile computer further comprises a clock;

the location manager is further configured to transmit a time of transmission to the server together with the location and user name information; and

the user database further comprises a time field for storing the time that a transmission identifying the location of the mobile user and the user name of the mobile computer user is received from the mobile computer.

Dunn teaches that the mobile computer further comprises a clock; the location manager is further configured to transmit a time of transmission to the server together

Art Unit: 2155

with the location and user name information; and the user database further comprises a time field for storing the time that a transmission identifying the location of the mobile user and the user name of the mobile computer user is received from the mobile computer (Column 8, lines 15 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Dunn's teaching of time-stamping and using that time-stamping in Theimer's user location system in order for the system to know where the last known location of a user is based upon what time the location.

Regarding claim 39, Theimer teaches the system as recited in claim 28.

Theimer does not explicitly indicate that location manager of the computing unit is further configured to:

- search the user database to locate an entry for a specific user;

- calculate a time differential between a current time and a time stored in the time field corresponding to the specific user if the specific user is found;

- compare the time differential to a time threshold;

- recognize the location contained in the last known location fields corresponding to the specific user as the location of the specific user if the time differential is within the time threshold; transmit a signal to cause the location manager of the mobile computer to invoke the location tracking system of the mobile computer if the time differential is not within the time threshold, to determine the location of the mobile computer and transmit location and user information to the server where it is stored in the user database; and

recognize the newly stored location contained in the last known location field corresponding to the specific user as the location of the specific user

Dunn teaches that location manager of the computing unit is further configured to: search the user database to locate an entry for a specific user; calculate a time differential between a current time and a time stored in the time field corresponding to the specific user if the specific user is found; compare the time differential to a time threshold; recognize the location contained in the last known location field s corresponding to the specific user as the location of the specific user if the time differential is within the time threshold; transmit a signal to cause the location manager of the mobile computer to invoke the location tracking system of the mobile computer if the time differential is not within the time threshold, to determine the location of the mobile computer and transmit location and user information to the server where it is stored in the user database; and recognize the newly stored location contained in the last known location field corresponding to the specific user as the location of the specific user (Column 8, lines 15 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Dunn's teaching of time-stamping and using that time-stamping in Theimer's user location system in order for the system to know where the last known location of a user is based upon what time the location.

Regarding claim 48, Theimer teaches the mobile computer using as recited in claim 45.

Theimer does not explicitly indicate a clock, and wherein the location manager is further configured to time-stamp the transmission of the location information with a time that the transmission is sent.

Dunn teaches a clock, and wherein the location manager is further configured to time-stamp the transmission of the location information with a time that the transmission is sent (Column 8, lines 15 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Dunn's teaching of time-stamping and using that time-stamping in Theimer's user location system in order for the system to know where the last known location of a user is based upon what time the location.

Regarding claim 55, Theimer teaches a method for locating a mobile computer user in a wireless network, comprising:

periodically identifying a location of a mobile computer that is used by a mobile user (Column 4, lines 30 – 33; Column 8, lines 45 – 58; Column 9, lines 35 – 37);

transmitting the location of the mobile computer to a network server together with the time stamp and a name of the mobile user;

storing the transmitted information on the network server (Column 8, lines 48 – 55; Column 6, lines 28 – 45);

receiving a request from a computing unit for the location of the mobile user (Column 9, lines 7 – 20);

determining the last known location of the mobile computer by accessing the network server; and recognizing the last known location of the mobile computer as the location is of the mobile user (Column 9, lines 31 – 33).

Theimer does not explicitly indicate using a beacon packet's signal strength received from the wireless access point and using a pervious established radio map. Christ teaches a system with a plurality of RF beacons (Column 9, lines 50 – 53) that polls the plurality of beacons for location/environmental information and their signal strength about the computing unit (Column 10, lines 34 – 53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Christ's teaching of locating users in certain rooms inside of a building (Column 7, lines 13 – 17) using present wireless technology (Column 9, lines 43 – 48) in Theimer's location system.

Theimer also does not explicitly indicate time-stamping the location of the first computer with the time that the first computer was identified.

Dunn teaches a system that includes locating mobile devices. Included in this teaching is a system of time-stamping the location information of the mobile device (Column 8, lines 15 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use time-stamping in Theimer's user location system in order for the system to know where the last known location of a user is based upon what time the location

Regarding claim 57, Theimer teaches transmitting an active signal together with the location information if the mobile user has actively used the mobile computer within a specified period of time (Column 9, lines 26 – 35).

Regarding claim 59, Theimer teaches a method comprising: receiving, at a server of a wireless network and from a mobile computer within the wireless network multiple locations of the mobile computer (Column 4, lines 30 – 33; Column 8, lines 45 – 58; Column 9, lines 35 – 37), each of the multiple locations received at recurring time periods (Column 9, lines 30 – 36); time-stamping each of the multiple locations based on the recurring time periods at which each of the multiple locations is received (Dunn, Column 8, lines 15 – 24); receiving, at the server, a request from a computing unit for a current location of a mobile computer user (Column 9, lines 7 – 20); determining that the mobile computer user is identified with the mobile computer (Column 8, line 59 – Column 9, line 1); and transmitting the location having the most-recent time-stamp to the computing unit (Column 8, line 59 – Column 9, line 1).

Theimer does not explicitly indicate using a beacon packet's signal strength received from the wireless access point and using a previous established radio map.

Christ teaches a system with a plurality of RF beacons (Column 9, lines 50 – 53) that polls the plurality of beacons for location/environmental information and their signal strength about the computing unit (Column 10, lines 34 – 53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Christ's teaching of locating users in certain rooms inside of

a building (Column 7, lines 13 – 17) using present wireless technology (Column 9, lines 43 – 48) in Theimer's location system.

Theimer also does not explicitly indicate time-stamping the location of the first computer with the time that the first computer was identified.

Dunn teaches a system that includes locating mobile devices. Included in this teaching is a system of time-stamping the location information of the mobile device (Column 8, lines 15 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use time-stamping in Theimer's user location system in order for the system to know where the last known location of a user is based upon what time the location

Regarding claim 61, Theimer teaches a method comprising:

receiving, at a server of a wireless network and sent from a mobile computer within the wireless network multiple locations of the mobile computer (Column 4, lines 30 – 33; Column 8, lines 45 – 58; Column 9, lines 35 – 37), each of the multiple locations sent at recurring time periods (Column 9, lines 30 – 36);

receiving, at the server, a request from a computing unit for a current location of a mobile computer user (Column 9, lines 7 – 20);

determining that the mobile computer user is identified with the mobile computer (Column 8, line 59 – Column 9, line 1);

transmitting the location to the computing unit (Column 8, line 59 – Column 9, line 1).

Theimer does not explicitly indicate determining which of the multiple locations has a most-recent time-stamp;

calculating a time differential between a current time and the most-recent time stamp;

comparing the time differential with a pre-defined time threshold; and transmitting the location having the most-recent time-stamp to the computing unit if the time differential is less than that of the pre-determined time threshold; or

invoking a location taking service to identify a most-current location of the mobile computer if the time differential is greater than the pre-determined time threshold;

receiving a more-current location of the mobile computer.

Dunn teaches determining which of the multiple locations has a most-recent time-stamp (Dunn, Column 13, lines 35 – 54);

calculating a time differential between a current time and the most-recent time stamp; comparing the time differential with a pre-defined time threshold; and

transmitting the location having the most-recent time-stamp to the computing unit if the time differential is less than that of the pre-determined time threshold; or

invoking a location taking service to identify a most-current location of the mobile computer if the time differential is greater than the pre-determined time threshold; receiving a more-current location of the mobile computer (Dunn, Column 13, line 55 – Column 14, line 11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use time-stamping in Theimer's user location system in order for

Art Unit: 2155

the system to know where the last known location of a user is based upon what time the location.

Theimer also does not explicitly indicate using a beacon packet's signal strength received from the wireless access point and using a pervious established radio map.

Christ teaches a system with a plurality of RF beacons (Column 9, lines 50 – 53) that polls the plurality of beacons for location/environmental information and their signal strength about the computing unit (Column 10, lines 34 – 53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Christ's teaching of locating users in certain rooms inside of a building (Column 7, lines 13 – 17) using present wireless technology (Column 9, lines 43 – 48) in Theimer's location system.

Regarding claims 60 and 62, Theimer teaches the method of claims 59 and 61, wherein the server is integral with a wireless access point (Column 5, lines 48 – 50).

Regarding claim 66, Theimer teaches the method of claim 63.

Theimer does not explicitly indicate time-stamping the location of the first computer with the time that the first computer was identified.

Dunn teaches a system that includes locating mobile devices. Included in this teaching is a system of time-stamping the location information of the mobile device (Column 8, lines 15 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use time-stamping in Theimer's user location system in order for

the system to know where the last known location of a user is based upon what time the location.

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer in view of Christ as applied to claims 16-17, 25-30, 32, 34, 36-38, 45-47, 49-50, 52-54, 63, and 65-67 above, and further in view of Crimmins (5917425).

Regarding claim 64, Theimer teaches the method of claim 63.

Theimer does not explicitly indicate that the act of identifying the location of the mobile computing device as that of the computer user comprises receiving from the mobile computer device an identifier associated with the computer user.

Crimmins teaches a mobile computing unit that uses a plurality of transmitters to determine its own location (Abstract, lines 1 – 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the mobile computer unit to determine the its own location in Theimer's system in order to save on battery life by only transmitting the location of the mobile unit if its important or changes have been made instead of transmitting information to beacons to for them to determine the location (Column 3, lines 4 – 32).

Response to Arguments

Applicant's arguments filed October 7, 2005 have been fully considered but they are not persuasive.

Regarding claim 58, the applicant argues that the reference, Theimer teaches a "near field", which is a partitioned cell based on an electromagnetic field, not an RF

signal, which is distinct from the limitation which discloses a wireless local area network configured to receive a radio frequency network transmissions.

The examiner disagrees, the limitation in the claim only mentions a local wireless area network, which a near field that uses infrared or radio transmissions are local and wireless (Column 5, lines 48 – 50) and the access point to receive radio frequency transmissions, which a electromagnetic field, or cell based transmission uses (Column 5, line 66), the mobile unit sends information to the local access point using a radio frequency, so the limitation is met.

Regarding claim 16, the applicant argues that the combination of the references, Theimer and Christ is improper and that there is no motivation to combine.

The examiner disagrees, the references, Theimer and Christ both disclose systems meant for locating and tracking users using wireless technology. Theimer discloses a system that includes a badge that uses specialized cell based, “near field” technology to track uses when they get near and communicate with local wireless access points (Column 6, lines 15 – 22). Christ uses a wireless system to track uses that takes advantage of existing items that are typically used in a work place, such as walkie-talkies or existing transmitters (Column 9, lines 43 – 48), and does not need the specialized active badge that Theimer discloses, and Christ uses those existing items and performs the same tracking and location identification that Theimer uses in his system. So they are both trying to solve the problem of finding users in a wireless system, and there is motivation to combine Christ’s teaching with Theimer in order to

improve it by having the tracking and locating using existing and widely used items instead of having active badges to locate and track users.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB

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November 8, 2005


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER